



**Certification for On-Site Generator Systems
Clean Energy Rewards
Department of Environmental Protection
Montgomery County, Maryland**

Introduction

Clean Energy Rewards (herein referred to as “the program”) was established under the Montgomery County Energy Policy (Chapter 18A Section 11) and Montgomery County Executive Regulation Number 2-06AM. It is a first of its kind program providing financial incentives to consumers who voluntarily choose to purchase electricity produced from clean energy sources, purchase renewable energy certificates (RECs) or “carbon offsets”, or generate their own electricity from an eligible clean energy source on-site. The program is geared towards residents, small businesses, non-profits, and congregations located in Montgomery County.

The program can serve nearly two thousand residential customers and over 100 non-residential participants with funds allocated for the 2008 fiscal year¹. The incentive for purchasing or generating clean energy is \$0.01 per kilowatt-hour (kWh) for residential participants, and \$0.015 per kWh for small businesses, non-profits, and congregations. Based on current prices for “green electricity” the Department of Environmental Protection estimates program incentives will offset about 40% of the cost of clean energy. Montgomery County will provide rewards for electricity purchased or generated on-site starting in July 2007.

Qualifications for Home and Other On-site Generators

The Clean Energy Rewards program provides incentives to Montgomery County residents, businesses, and other organizations that generate electricity on-site using an eligible renewable energy source such as wind, solar, or biomass; therefore solar water heaters, and wood or corn stoves are not eligible for rewards through this program. Photovoltaic panels and wind turbines are likely to be the most common electricity generation systems in the county. However, DEP will work with those entities using other technologies consistent with the program’s criteria, i.e., sustainable biomass systems, individually. Please contact DEP directly to inquire about your system’s eligibility: 240-777-7700.

On-site generators produce electricity within the owner’s property boundaries to offset all or a portion of the electricity required by the owner. Businesses or other organizations that produce electricity for profit are not eligible to participate in this program.

¹ Montgomery County’s fiscal year is from July to June. The estimated participants served are based on annual maximum clean energy consumption caps (20,000 kWh residential, 100,000 kWh non-residential). Incentive distribution will begin July 2007.

How to Enroll in the Clean Energy Rewards Program

In order to receive rewards for generating electricity at a home, business, or other building located in Montgomery County using a photovoltaic system, the owner of the system must submit the following documentation:

1. An On-Site Generator System Application Form
2. Clean Energy Rewards Memorandum of Understanding (MOU)
3. A picture of the system
4. A copy of your most recent electricity bill, and/or proof of enrollment to purchase clean electricity or renewable energy certificates (RECs) offset at least 50% of the building's annual electricity consumption.
5. Optional: A copy of the system's Maryland Energy Administration Grant Application, and/or system documentation provided by the system's installer.

DEP will review the documents and return a completed MOU to the owner for its records. The MOU must only be submitted once and is a valid agreement for the life of the program unless acted upon by either the owner operator or the County. Once all of the information listed above is submitted to DEP the owner will be officially enrolled in the program and be eligible to receive rewards.

Certifying On-site Generation Systems

Any residential or non-residential property located in Montgomery County that generates electricity on-site must submit the system's specifications to the Department of Environmental Protection (DEP) before receiving a reward for any clean energy generated (see section: *How to Enroll in the Clean Energy Rewards Program*). All system information must be delivered to DEP in a format provided by the Department. For instance, owners of Photovoltaic systems should use the *On-site Generator Application Form – Photovoltaic Systems*. Please contact DEP if you would like to submit another type of on-site generation system technology for review. DEP may choose to visit the site of some systems for verification purposes.

Once a system is certified it is enrolled in Clean Energy Rewards for the life of the program. Please contact DEP with any information about system improvements as that may affect the amount of the reward.

DEP's efforts to verify the operation and eligibility of a system in order to participate in the program is an act of due diligence on behalf of the County to its taxpayers. Data about each program participant and their system will be considered confidential and will not be released to the public. However, aggregate data identifying the types of systems used and the average size of the system(s) may be released for evaluation and reporting purposes.

Estimating Rewards

DEP will require on-site generation system owners to submit system specifications to DEP to use in calculating the electricity generated by that system. The Director of the Department will approve one methodology for each system type to use in estimating the electricity generation of similar systems. This ensures program consistency and fairness. For instance, DEP will calculate the estimated energy production of a photovoltaic system using the National Renewable Energy Laboratory's PV Watts Calculator. At a minimum, operators of PV systems will be required to submit:

- Make and model of the system
- Size of the house or building (in ft²)
- DC Rating (kW)
- Array Type
- Fixed tilt or 1-Axis tracking system: Array tilt (degrees), and Array Azimuth (degrees)
- Initial Operation Date
- Photographs of the system

Data sets for other types of on-site generation systems will be considered on an as needed basis. The information requested will be similar and may include the type of technology and fuel source used, photographs of the system, the system's installer, and any electricity generation history. Please allow DEP a minimum of two weeks to determine the appropriate methodology to use in estimating electricity generation for non-PV systems.

DEP reserves the right to conduct site inspections to verify that the system exists, conforms to specifications provided, and is operating properly. If the system is installed and operating as of July 1, 2007, then rewards will begin accruing at that time. If the system is installed after July 1, 2007, then the rewards will begin accruing the date installation is complete as stated by the system's installer.

Participant Minimum and Maximum Energy Requirements

All participants in the Clean Energy Rewards program must offset 50% of their annual electricity consumption from clean energy sources. Some on-site generation systems may offset 50% of the home's or building's energy use. If this is the case, then the owner meets the 50% minimum clean energy requirement.

However, many on-site generation systems may not solely offset 50% of a home's or building's annual electricity use. Therefore owners of the building can meet the 50% annual electricity consumption requirement by purchasing clean electricity from a program eligible electricity supplier, or renewable energy certificates (RECs) from a program eligible REC marketer.

DEP will rely on the owner's electricity bill to determine the amount of clean energy to be purchased. The electricity bill should provide the amount of electricity the owner uses after the volume of clean electricity is accounted for. For example, a 1.5KW PV system might generate 1500 kilowatt-hours (kWh) per year and offset this electricity from an average home's annual energy consumption. If the average home in Montgomery

County uses 12,000 kWh per year, then the owner must purchase clean energy equivalent to 50% of the remaining 10,500 kWh of electricity used; 5,250 kWh.

The owner can procure clean electricity or renewable energy certificates (RECs) from a program certified Clean Energy Rewards supplier. The rewards for the clean energy purchase will be delivered to the consumer through the product supplier. If the owner wishes to purchase clean electricity many suppliers provide 50% products. This will alleviate the need to calculate the amount of clean electricity to purchase.

Owners must provide documentation verifying that they offset at least 50% of their annual energy consumption with clean energy. Please attach a copy of a bill from a program eligible clean energy supplier verifying the purchase of clean electricity, or a bill from a program eligible REC marketer verifying the purchase of RECs.

Montgomery County will provide rewards for clean energy up to 20,000 kWh annually for residents and up to 100,000 kWh annually for non-residential participants (businesses, congregations, and non-profits). Any consumer's clean energy consumption outside of the maximum limit for their consumer category will not be considered for eligible for rewards.

Reward Payment Process

Owners will receive a reward check from Montgomery County after the annual electricity generation for the system is calculated. Rewards will be delivered in a one time payment for all estimated electricity generated that fiscal year. All system information must be submitted to DEP by June 2, 2008 in order to receive a reward for that fiscal year². Any data collected after June 2 will be used for a payment for the following fiscal year, provided funds are provided for the program. Owners will receive rewards within 6-8 weeks of delivering system data to DEP.

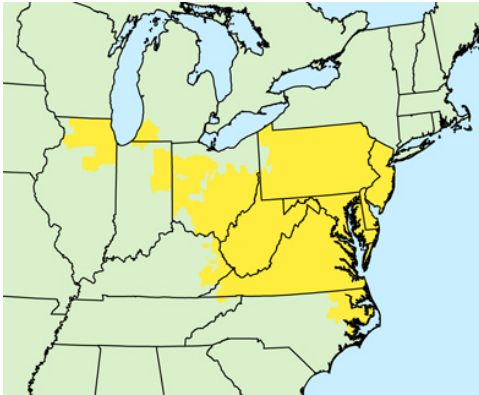
Rewards for any clean energy purchased from an electricity supplier or RECs from a REC marketer will be delivered to the owner by the supplier. Rewards for clean electricity will appear as a credit on the owner's electric bill. Rewards for RECs will either be discounted from the original price of the REC, or credited to the bill.

² Montgomery County's fiscal year runs from July to June. DEP must allow for time to collect and process all of the necessary documents and materials from on-site generators and submit rewards payment requests to the Finance Department before the close of the fiscal year.

Program Glossary

The terms below are defined in the Montgomery County Executive Regulation 2-06AM. Please review this regulation and refer to these definitions when reading program related documents to clarify the intent of the program.

Clean Energy – Electricity that is generated from eligible renewable energy sources (wind, solar, and biomass), or represented by Renewable Energy Certificates.



Since the environmental benefits of the Clean Energy Rewards program are intended to improve the air quality for Montgomery County consumers, renewable electricity must be generated in the PJM Regional Transmission Organization (RTO) territory (Pennsylvania, New Jersey, Delaware, Maryland, West Virginia, Virginia, and parts of North Carolina, Ohio, Indiana, Michigan and Illinois). See Exhibit 1.

DEP will monitor the supply of renewable electricity in the PJM region and nationally.

Suppliers will be responsible to verify that the electricity in their products was generated in the region. This information will be used for program purposes only and will not be released to the public.

Exhibit 1. PJM Service Territory

Source: <http://www.pjm.com/about/territory-served.html>

Accessed 4/2/2006

Consumer – Any individual or entity in the County, except a governmental entity, that purchases or uses clean energy.

Residents, businesses, non-profit groups, congregations, and other non-governmental entities located in Montgomery County are eligible to participate in the Clean Energy Rewards program. For simplicity, the term non-residential will be used throughout the document for all commercial, non-profit, and congregational facilities.

Eligible clean energy cap – The maximum amount of clean energy that is eligible for incentive payments under the program, as set by Council resolution.

The caps are in place to monitor the program's budget and ensure that one end-user does not exhaust all program resources. Residential consumers can receive a reward for up to 20,000 kWh, and commercial consumers can receive a reward for up to 100,000 kWh of clean energy consumed per year.

Eligible renewable energy sources – Wind, solar, and biomass as defined as a Tier 1 renewable source in the Maryland Code, Public Utility Company Article, §7-703 (see: Maryland Renewable Energy Portfolio Standard).

Electricity generated from biomass must originate from low-impact sources as defined as a Tier 1 resource by the Maryland Renewable Portfolio Standard. This includes: energy

crops, wood waste, agricultural residues, landfill gas, anaerobic digesters, and others. Electricity generated from municipal, commercial, or industrial hazardous waste via incinerator will not be certified as clean energy or be eligible for rewards through Clean Energy Rewards.

Incentive rate – The clean energy incentive rate set by Council resolution.

The incentive rate for FY 2008 is \$0.01 per kWh for residential participants and \$0.015 per kWh for commercial participants.

On-site generator – An on-site electricity generation system that utilizes an eligible renewable energy source.

On-site generation systems operated by either residential or non-residential consumers are eligible for rewards. The operation of this system cannot be solely for generating and selling electricity. Most on-site generators in the Montgomery County operate solar photovoltaic (PV) systems. However, other systems such as small wind turbines and biomass fueled generators are also eligible.

Renewable Energy Certificate or Credit, or “REC” – A clean energy product sold by a clean energy generator that represents the market value of the environmental attributes of eligible clean energy generation within the PJM service territory.

To earn rewards through the program, RECs sold to consumers cannot be:

- Disaggregated
- Used to validate clean energy products
- Used to retire or fulfill any Public Service Commission requirement such as the RPS.